HEXCEL

December 8, 1989

DEC 12 1989

NJDEP
Industrial Site
Evaluation Element
CN 028
Trenton, NJ 08625

Mr. Steve Mayberry
New Jersey Department of Environmental Protection
Division of Hazardous Waste Management
401 E. State Street, Fifth Floor
CN028
Trenton, NJ 08625

Re: ECRA Case No. 86009, Hexcel Corporation, Lodi, New Jersey

Dear Mr. Mayberry:

We are writing on behalf of Hexcel Corporation to respond to your draft approval for the Cleanup Plan for the former Hexcel Industrial Chemicals Group Facility, currently owned and operated by Fine Organics Corporation, in Lodi, New Jersey. We have reviewed the draft of the Cleanup Plan and have formulated responses to each of the conditions presented in the Plan. For clarity of presentation, each condition is restated below in its original form, followed by our response to the condition, and our requested action for possible modification to the condition in the final Cleanup Plan Approval.

CONDITION No. 1

Soils

The Cleanup concentration requirements for soil contamination on site is as follows:

A. Volatile Organics - 1 ppm
B. Total Petroleum hydrocarbon - 100 ppm
C. PCB - 5 ppm
D. Base Neutrals - 10 ppm
E. Acid Extractables - to be determined
F. Priority Pollutant Metals (PPM):

Antimony	10 ppm
Arsenic	20 ppm

Barium	400 ppm
Baryllium	1 ppm
Cadmium	3 ppm
Chromium	100 ppm
Copper	170 ppm
Lead	250 ppm
Nickel	100 ppm
Mercury	1 ppm
Molybendum	1 ppm
Selenium	4 ppm
Silver	5 ppm
Thallium	5 ppm
Vanadium	100 ppm
Zinc	350 ppm

RESPONSE

Hexcel recognizes that these Cleanup concentrations are largely consistent with informal ECRA action levels established by NJDEP.

REQUESTED ACTION

No requested action.

CONDITION No. 2

Hexcel Corp. can develop and submit for review and approval alternate cleanup concentrations so that final site specific cleanup concentration can be approved. The Department recommends that the alternate site specific cleanup concentrations be submitted for approval once the following interim cleanup goals are achieved by the proposal remediation. All site specific cleanup numbers shall be submitted with a rationale for their deviation and shall be based on the health and environmental risk associated with contamination at this site. Metals, base neutrals and acid extractable contamination is relatively insignificant at this site and therefore not driving the cleanup. However in later stages of cleanup modifications of the cleanup many be required for full compliance.

Interim Cleanup Goals

Volatile Organics -	100 ppm
TPHC	1000 ppm
PCBs	5 ppm

RESPONSE

There is no reference to a specific time at which a proposal for alternate cleanup concentrations may be submitted for review.

The results of the soil remediation pilot studies may reveal that technology limitations should be considered in the selection of alternate cleanup concentrations. It may therefore be appropriate that alternate cleanup concentrations be based on health and environmental risks and/or technology limitations.

If the Department anticipates that metals, base neutrals, and acid extractables constituents will require additional soil remediation procedures beyond those proposed in the Plan, then Hexcel should be informed of such requirements prior to implementation of remediation procedures. Knowledge of any requirement is necessary to prevent unnecessary expenditures of time and money on procedures that may not address all parameters of concern.

REQUESTED ACTION

Amend this condition to read as follows:

Hexcel Corp. can develop and submit for review and approval alternate final cleanup concentrations. An analysis of cleanup concentrations that can be achieved using currently available technologies will be conducted following soil remediation pilot studies. If the lowest concentrations that can be achieved are higher than the informal ECRA action levels, a proposal for alternate cleanup concentrations reflecting technology limitations should be submitted to NJDEP for review and approval.

CONDITION No. 3

Hexcel Corp. shall implement a contingency plan of excavation of all soil contamination above the approved cleanup levels with post excavation/continuous sampling if the proposal remediation/pilot testing can not meet the required objectives.

RESPONSE

It is presumed that this condition refers to development of a contingency plan rather than implementation. It is our opinion that it is premature to require the development of a contingency plan for excavation. Preparation of such a plan without any indication that excavation will be necessary to achieve cleanup goals is inappropriate because of the associated engineering costs. In addition, the development of a contingency plan for excavation should be preceded by an assessment of the public health risks that may be incurred. Given the volatile nature of chemicals in soils and ground water at the site, excavation may not be feasible.

REQUESTED ACTION

Delete this condition.

CONDITION No. 4

Groundwater

The cleanup concentration requirements for groundwater contamination will be set at a later time when all on and offsite time when all on and offsite receptors of contaminated groundwater discharge have been identified. At that time Hexcel Corp. shall propose cleanup concentrations. Hexcel Corp. can apply to the Department for Alternative Concentration Limits (ACLs) as stipulated in N.J.A.C. 7:14-6.15. Due to the high levels of groundwater contamination at the site Hexcel Corp. shall immediately begin cleanup of groundwater.

RESPONSE

The stipulation that cleanup of ground water begin immediately is inappropriate because ground water remediation procedures cannot begin until associated permits and approvals have been obtained and equipment for collection and treatment of ground water have been installed. The time schedule is also inconsistent with Condition No. 20 , which allows a period of 150 days to begin ground water remediation.

REQUESTED ACTION

The last sentence of this condition be amended to read as follows:

Hexcel shall begin cleanup of ground water in accordance with the remediation schedule as defined in Condition No. 20.

CONDITION No. 5

Groundwater Confirmation Sampling Requirements

Additional groundwater well installations sampling, and information as conditioned below is necessary to verify the location and movement of groundwater and contaminant plumes and to monitor the effectiveness of pumping and cleanup. Full monitoring requirements will be established and conditioned as part of the New Jersey pollution Discharge Elimination System (NJPDES) Discharge to Groundwater (DGW) permit.

RESPONSE

This condition refers to the establishment of full monitoring requirements but does not provide an indication of the type, frequency, or duration of monitoring activities. Because the monitoring activities serve only to provide an estimate of how long treatment procedures should continue and it is expected that remediation of ground water will require many years to complete, frequent chemical testing of ground water will have no apparent benefit, and it is suggested that testing occur on no more than an annual basis. Water level

measurements and testing of ground water treatment system effluent should occur more frequently.

REQUESTED ACTION

The last sentence of this condition should be amended to read as follows:

Monitoring requirements will be established in the New Jersey Pollution Discharge Elimination System (NJPDES) Discharge to Groundwater (DGW) permit. Testing of the ground water to determine concentrations of chemicals will occur annually and will continue until ground water remediation activities are completed.

CONDITION No. 6

Hexcel Corp. shall install a well cluster in the sidewalk across Main Street from HW1/HW17 as conditioned below.

A. Within 15 days of Cleanup Plan approval, Hexcel must submit to BEECRA a copy of the written request to either Lodi Boro, Bergen County, or the State DOT (depending on jurisdiction) seeking access to install a cluster well in the sidewalk across Main Street from cluster location MW1/MW17.

B. Within 45 days of receipt [of approval from the Borough and/or DOT. If a] clay layer is encountered in the borehole, install a well cluster to similar specifications as cluster MW1/MW17. If the clay layer is not encountered, install a single well approximately 20 feet deep with a five foot screen length (similar to MW1).

RESPONSE

The first sentence in Part B should be altered to state that that well installation will commence following receipt of approval from the Borough of Lodi and/or the Department of Transportation, as shown in brackets above.

A review of traffic and utility conflicts (eg. underground gas lines, overhead power lines) may reveal that a well cluster in the side walk can not be safely constructed. A soil gas survey in this area would be much less disruputive and intrusive on public and private properties, and should provide sufficient information regarding whether volatile chemicals are present in the ground water in this area. The timing of this soil gas survey should be coordinated with other proposed soil gas surveying activities at the facility as described later in this letter.

REQUESTED ACTION

This condition should be amended to read as follows:

Hexcel shall conduct additional investigations to determine whether chemicals detected in well MW1/MW17 have migrated across Main Street. These investigations will include a soil gas survey, to be conducted within 45 days of Cleanup Plan approval. Based on the results of this survey, the Department may require that a monitoring well be constructed in this area.

CONDITION No. 7

Hexcel Corp. shall install within 45 days of Cleanup Plan approval, a shallow monitor well approximately 120 feet northeast of cluster location MW4/MW5 along the fence behind the restaurant.

A. Well construction shall be similar to that of MW4: set the screen from the top of the clay to approximately two feet above the water table.

B. If the clay is not encountered, then a cluster well is required: the shallow well must have eight feet of screen with the top set two feet above the water table; the deep well must have five feet of screen with the bottom set at the top of bedrock.

C. Soil gas monitoring data shall be collected while drilling this well as a screening tool to assess potential vapor impacts to the restaurant. Hexcel must determine whether the restaurant has a basement or crawl space beneath it; if so, Hexcel must perform air monitoring here also as part of vapor assessment.

RESPONSE

A soil gas survey conducted prior to well installation would provide an indication of the optimum location for a monitoring well in this area. The preferred location for this monitoring well would be beyond the boundary of the area in which the ground water has been found to contain elevated levels of VOCs.

Because of equipment mobilization considerations associated with the installation of the numerous wells required pursuant to the Cleanup Plan, it would be beneficial if all well installation activities were coordinated. In addition, because the work associated with the construction of so many new wells is extensive, a deadline for commencement of installation is more appropriate than a deadline for installation.

REQUESTED ACTION

Revise the Condition to read as follows:

Hexcel Corp. shall install a shallow monitoring well cluster at a location approximately 120 feet northeast ...

Add condition 7.D. as follows:

D. A soil gas survey should be conducted prior to well installation. The survey should be completed within 45 days of Cleanup Plan approval. In addition, the well installation activities should commence within 45 days of completion of the soil gas survey.

CONDITION No. 8

Hexcel shall install two shallow wells in Molnar Road as conditioned below.

A. Within 15 days of Cleanup Plan approval, Hexcel must submit to BEECRA a copy of their written request to the Boro of Lodi requesting a road opening permit to install a minimum of two shallow wells in Molnar Road.

B. Within 45 days of receipt of the Boro's permission, install the two wells, one immediately west of boring 107, one immediately east of boring 109.

C. If the clay is encountered approximately seven feet below grade, install four (4) feet of screen.

D. Cement should be used instead of cement-bentonite grout to seal the well annulus due to the heavy truck traffic in Molnar Road.

RESPONSE

The same scheduling concerns addressed in Condition 7 apply to installation of these wells.

REQUESTED ACTION

Amend Condition 8.B. to read as follows:

Hexcel shall commence installation of two wells within 45 days of receipt of the Borough's permission, one immediately west of boring 107, one immediately east of boring 109.

CONDITION No. 9

Within 15 days Hexcel Corp. shall within 15 days from receipt of this approval submit, a copy of the written request to Knapp Chemical seeking site access to install a shallow monitor well in their parking lot approximately 20 feet south of the property line, as proposed by Hexcel. This monitoring well shall be installed within forty five (45) days of Knapp Chemical's approval.

RESPONSE

The same scheduling concerns addressed in Condition 7 apply to installation of these wells.

REQUESTED ACTION

Amend the last sentence of this condition to read as follows:

The installation of this monitoring well shall commence within forty-five (45) days of Knapp Chemical's approval.

CONDITION No. 10

Hexcel Corp. shall within seventy five (75) days from receipt of this approval install minimum of four monitoring wells or piezometers in the floor of building II and one monitoring well at boring 502 as conditioned below.

A. Install single wells/piezometers near borings 604 and 610. These wells/piezometers should be set just above the concrete refusal encountered at about 14 feet below the floor in each boring.

B. Hexcel Corp. shall install a cluster well/piezometer above the concrete (encountered at 16.5) feet below the floor), the "deep" well/piezometer should be double cased into the concrete and have a two foot screen length set just below the concrete, in the clay 502.

C. Install a single well at boring 502.

D. Hexcel shall propose in writing, before installing these wells or piezometers, proposed installation method. If a tripod rig is used, specify how the boreholes will be kept open while the wells are installed.

E. If these wells accumulate water and/or product, samples must be analyzed for volatility organic compounds VOCs using Method 624+15. If the wells remain dry, vapor samples should be collected from them and approximately analyzed for VOCs.

RESPONSE

The required installation of wells and piezometers inside Building II is not practical because it is not possible to bring a drill rig into the building. The prior drilling of pilot borings through the building floor indicated that the underlying soils are variably saturated. Evidence of DNAPL was observed as a thin layer at the top of the concrete slab that underlies the building. The thickness of this layer appears to be too thin too allow removal by pumping. Also, the observed ground water conditions suggest that it is unlikely that ground water could be remediated in this area by a pumping strategy. If remediation of the soil under

the building is needed, soil venting would be a more appropriate procedure. While it is not practical to constuct wells beneath the building, even if it were possible, the drilling of a casing through the underlying concrete slab would be at the risk of allowing DNAPL to migrate through the slab into an area that may not be contaminated.

Installation of a well at soil boring 502 would serve no useful purpose because soil samples from that area have already provided a clear indication that the ground water is contaminated, and Hexcel concedes that ground water remediation is required in this area.

As discussed below in the response to Condition No. 27, there is no benefit to implementing soil remediation procedures until ground water and DNAPL collection systems have been installed.

REQUESTED ACTION

Delete Condition No. 10 in its entirety.

CONDITION No. 11.

There is no Condition No. 11 in the Cleanup Plan.

CONDITION No. 12

Hexcel Corp. shall within forty five (45) days of cleanup approval install a shallow aquifer monitoring well near boring 904.

RESPONSE

A soil gas survey, conducted prior to well installation, would provide an indication of the optimum location for a monitoring well in this area. The preferred location for this monitoring well would be beyond the boundary of the area in which the soil gas is found to contain elevated levels of VOCs.

REQUESTED ACTION

Amend the condition to read as follows:

Hexcel Corp. shall install a shallow aquifer monitoring well in the approximate area of boring 904. A soil gas survey should be conducted prior to well installation. The survey should be completed within 45 days of Cleanup Plan approval. Well installation activities should commence within 45 days of completion of the soil gas survey.

CONDITION No. 13

Hexcel Corp. shall with sixty (60) days of this approval submit a proposal to determine all on and off site receptors of contaminated groundwater discharge. This information is required to document the potential affects of contaminated groundwater at this sit and to facilitate final decisions regarding the need for further remediation and investigation. Following are two specific reasons for this investigation.

A. If natural discharge from both aquifers is into Saddle River, aquifer remediation criteria would be less conservative than if the overburden aquifer(s) serve to recharge the underlying bedrock aquifer remediation criteria would be less conservative than if the overburden aquifer(s) serve to recharge the underlying bedrock aquifer away from the site. Determining receptors of contaminated ground water discharge will facilitate the Department's consideration of Hexcel's request for Alternate Concentration Limits (ACL).

   To persuasively establish whether the lower unconsolidated aquifer discharges into the stream bed, Hexcel shall determine the stream bed stratigraphy, which may require Hexcel to install piezometers across the stream and/or in the stream bed and to place staff gauges in the stream bed.

B. Investigation of the ground water quality in the shallow bedrock aquifer does not appear to be necessary if Hexcel can demonstrate that the unsolicited aquifers do not recharge the bedrock aquifer in the vicinity of the site. Hexcel Corp. shall determine that receptors and conduct a well search as specified below to document a bedrock aquifer investigation is not required.

RESPONSE

With regard to the determination of the stream bed stratigraphy, staff gauges are already in place in the stream bed. Installation of piezometers is not practical, because the available geographic information suggests that the stream bed sits on a clay layer. Shallow sampling of the stream bed may provide sufficient evidence to confirm this assumption, eliminating the necessity of further surveying activities.

REQUESTED ACTION

Amend the second paragraph of Condition 13.A. to read as follows:

To persuasively establish whether the lower unconsolidated aquifer discharges into the stream bed, Hexcel shall determine the stream bed stratigraphy, which may require Hexcel to collect shallow samples of the stream bed.

CONDITION No. 13

Hexcel Corp. shall within 60 days from receipt of this approval submit the results of a well search within a half mile radius of the site. In addition to searching the well records file on microfiche at the Bureau of Water Allocation, Hexcel must contact the Bergen County Health Department and the local health department, if applicable, for additional data. Submit an appropriately scaled map depicting all wells, and a table of well specifications including but not limited to depth, length of casing, pump setting, pumping level, yield, water use and water quality. All closed and "out of service" potable wells found must also be plotted.

RESPONSE

Two conditions are numbered 13. This condition should be numbered 14.

REQUESTED ACTION

No requested action.

CONDITION No. 15

Soil Confirmation Samples Requirements

Confirmation sampling is required prior to implementation of soil remediation and shall begin immediately to fully define the limits and all sources of contamination on site. The results of sampling shall be submitted to the Department in an interim report due within 100 days from receipt of this document.

A. Confirmation sampling shall utilize field screening of soil samples using the 9/88 sampling round method (a 10.2 and a 11.7 ev lamp shall be used). This method was demonstrated effective for this site as evidenced by only a single anonaly for a shallow (18-24") sample (401:HNμ - 20/50 ppm, VO - 0.1 ppm). Note that positive correlation occurs when an HNμ reading of 1 ppm or higher is obtained in the field and the split sample measures 1 ppm or higher when lab analyzed for total VO.

B. Two potential sources to contamination in monitoring wells MW1 and HW17 shall be included in the sampling are.

   1. A former drum storage area at the maintenance building.

   2. and a possible tank farm at the southeast corner of the maintenance building as observed in the 1940 aerial photo of the site.

C. All conditions of the NJDEP letter dated December 28, 1987 shall be implemented. The specific conditions of that letter shall be implemented as follows:

1. Conditions listed for Item #20 Area #s 1,5,6,8, and 13.

2. Conditions provided in Item #23

3. All proposal borings at sample point C3 (surface spill or individual sewer leak) as per the Princeton Aqua Science - August 1985 investigation).

RESPONSE

A. A soil gas survey would provide a more accurate assessment of the concentrations of VOCs in soil than would be provided by the head space tests. Comparison of the HNu screening results to the laboratory analyses indicates that HNu screening is reasonably effective in determining whether or not VOCs are present in quantities above 1 ppm, but that it is not adequate in quantifying the concentrations in the soil.

B. Samples from two soil borings on the east side of the maintenance building and two on the south side will be collected and analyzed for the presence of VOCs using HNu screening tests.

C.1. Item #20:

Area 1 Boring 101 cannot be located directly adjacent to the building because of obstruction from overhead power lines.

Area 5 It is not possible to drill in the area specified in the letter because of obstruction from overhead power lines.

Area 6 HNu screening tests and a PCB analysis have already been conducted in this location. The soil sample boring is designated as 602.

Area 8 This boring is already in place and is designated as 1401.

Area 13 It is not possible to add a boring on the building side of the manhole due to obstruction from sewer lines running into the manhole. Boring 1302 was instead located in this area on the creek side of the manhole.

C.2. Item #23

Complete priority pollutant analyses have been performed on soil samples from borings 801, 901, and 1101 and monitoring well MW1. Complete priority pollutant analyses have also been performed on a soil sample from boring 601, which is adjacent to the tank farm specified in Item #20, and the results indicate that VOCs are the only parameters of concern in this

area. In addition, the results of the Princeton Aqua Science analyses indicate that there are no detectable levels of other priority pollutants in soils in the specified area, and further sampling is unwarranted and unnecessary.

The results of priority pollutant analyses in AEC 2, 3, 5, and 10, conducted by Princeton Aqua Science in June, 1985 and submitted in the original ECRA II report, indicated that metals and base neutral and acid extractable components were not present above detectable levels in these areas. The BEECRA rejected these results in a letter dated April 26, 1988 because QA/QC documentation, which was not available to ENVIRON at that time, was not included. The QA/QC documentation has since been compiled and was submitted to the Department on May 4, 1988. Therefore, the requirement to conduct additional testing in these areas is unwarranted.

C.3. An analysis of a sample from this area has already been performed. The analysis results for this sample, designated 536A-0601-GB01, will be submitted to the NJDEP in the interim report.

REQUESTED ACTION

Amend the Condition 15.A. as follows:

Confirmation sampling is required prior to implementation of soil remediation to fully define the limits and all sources of contamination on site. The results of sampling shall be submitted to the Department within 100 days of receipt of this document.

A. Confirmation of levels of VOCs in soils will be obtained via a soil gas survey. A small number of HNu screening tests will be conducted to provide additional verification of the presence of VOCs in soil. The soil gas survey should be completed within 45 days of receipt of Cleanup Plan approval.

Condition 15.C. should be deleted.

CONDITION No. 16

Hexcel Corp. shall sample the sediments at the storm sewer outfall to the Saddle River quarterly for PCBs. The first round shall be submitted in the interim report and each subsequent round shall be submitted on a quarterly basis.

RESPONSE

Previous sampling results indicate that the levels of PCBs in the sediments are very low, ranging from 0.3 to 2.4 mg/kg. Quarterly sampling of the sediments is appropriate until the sewer connection is closed.

REQUESTED ACTION

This condition should be amended to read as follows:

Hexcel Corp. shall sample the sediments at the storm sewer outfall to the Saddle River for PCBs quarterly until the sewer connection is closed (as per Condition 27.B.). The first round shall be submitted in the interim report and each subsequent round shall be submitted on a quarterly basis.

CONDITION No. 17

Hexcel Corp. shall submit the following information as part of the interim report.

A. The election voltage rating of the MMw probe used for the 9/88 sampling.

B. The results of the Department of Energy sampling.

C. The following quality control quality assurance (ahpqc) information, clarification, and actions are required.

1. Documentation indicates that samples from boring 801, 1401, 1302, 103, 1303 and 1506 may have been improperly preserved. Hexcel Corp. shall document proper preservation of all samples, collected. If preservation of samples was improperly performed all samples delineating the "clean zones" shall be resampled and the results submitted within ninety (90) days from receipt of this letter.

2. Chain of custody for MW1 thru 5, 8, 9, 12, and 15 were completed incorrectly. Hexcel shall provide clarification and documentation for gaps in all chain of custody records and shall properly complete records for all future sampling. The courier shall be noted on all chain custody forms.

3. Methylene chloride was detected in soil sample 1102-SB01 ([8-24") at 5.8 ppm but was not reported on site map. Data must be reviewed by applicant and these and other errors corrected and addressed in the interim report.

4. "Medium" level analyses for organics were utilized for several samples and are acceptable, however, if blanks are contaminated, detection limits may be above action level. Clean zone samples must be reviewed by applicant to ensure that "low" level analyses were utilized and action levels were not compromised. If detection limits were above action level in any clean zone samples these locations shall be resampled to contain the clean zone.

RESPONSE

A. It is assumed that this item refers to the rating of the HNu lamp.

B. Fine Organics Corporation received a letter from the Department of Energy on November 14, 1988 which provided a preliminary assessment of the findings of the study. A copy of this letter was submitted to the Department on December 22, 1988. The final report from the Department of Energy investigation was received by Fine Organics Corporation on December 4, 1989 and will be submitted to the NJDEP as requested.

C.1. A review of preservation procedures will be prepared as requested.

C.2. No response.

C.3. This condition incorrectly states that methylene chloride was detected in soil sample 1102-SB01 at 5.8 ppm. The concentration of methylene chloride in this sample was 0.068 ppm, which is well below the informal ECRA action level. This constituent was also detected in the field blank for this sample. Results for constituents which were detected in field blanks were not shown on the soils and ground water maps. A further review of those data will be conducted as requested, however.

C.4. No response.

REQUESTED ACTION

Condition 17.A. should be amended to read as follows:

The electron voltage rating of the HNu probe used for the 9/88 sampling.

CONDITION No. 18

Hexcel Corp. shall depict on a single map as mg/kg, all soil data above action levels for volatile organics, total petroleum hydrocarbon, and PCB's from all sampling rounds. To ensure that the map will be adequate Hexcel Corp. shall submit for approval, a draft map for a single area of concern prior to submittal of the interim report.

RESPONSE

Soil data for components detected at concentrations above informal ECRA action levels have already been depicted on several maps. It is not feasible to put all of this information on a single map because of space limitations. Also, it is not clear whether or not NJDEP is requiring that the Princeton Aqua Science data be included on a map.

REQUESTED ACTION

This condition should be deleted.

CONDITION No. 19

Hexcel shall immediately apply for all anticipated permits and shall send copies in duplicate of all permit applications to this bureau within thirty (30) days from receipt of this approval.

A. A NJPDES SIU Permit for discharge Permits, Wastewater Facilities Management Element (WWFME), DWR (292-4860).

   As part of the SIU application, Hexcel must contact the Passaic Valley Sewerage Commission (PVSC) to determine if a sewer extension ban exists.

B. A Sewer Extension Permit for rebuilding, replacing the industrial sewer and construction of any sewer pumping facilities, and a Treatment Works Approval from the Bureau of Construction and Connection Permits, WWFME, (984-4429).

C. An air cleanup apparatus from the Bureau of New Science Review, Engineering and Technology Element, DEQ (292-6216).

D. A NJPDES Discharge to Ground Water Permit to establish a ground water quality (sampling) and hydraulic monitoring and reporting schedule for the duration of the cleanup from this Bureau (292-0420).

E. A NJPDES Discharge to Surface Water Permit from the Bureau of Industrial Discharge Permits if the SIU Permit is denied.

RESPONSE

A complete set of engineering drawings, plans, and profiles is required as part of the application for a Sewer Extension Permit required under Condition 19.B. Because preparation of these documents involves a significant amount of engineering work, it is not possible to complete these documents and subsequently submit the application for this permit within 30 days of receipt of the Cleanup Plan approval.

REQUESTED ACTION

Add a sentence to Condition 19.B. that reads as follows:

Hexcel shall apply for this permit within 90 days of receipt of the Cleanup Plan approval.

CONDITION No. 20

Hexcel Corp. shall install the proposal shallow well point system for pumping groundwater from the water table along Main Street (upgradient) with the following conditions.

A. The well point pumping system shall be operations within one hundred and fifty (150) days from receipt of this approval.

B. One or more deeper wells points may be required due to the discontinuation in the clay layer in the vicinity of MW17.

C. Remediation of the lower unconsolidated aquifer may not be warranted given the contaminant levels as currently established. However, remediation of this aquifer may be necessary at AEC 15 and in the vicinity of MW1. Cleanup of the lower aquifer shall not be implemented until the additional delineation of contaminant distribution in the lower aquifer is complete and the upper aquifer remediation systems are operating.

RESPONSE

A soil gas survey is proposed along Main Street prior to installation of the shallow well point system. The information from this survey will be useful in establishing the location and number of well points.

REQUESTED ACTION

Amend Conditions 20.A. and 20.B. as follows:

Hexcel Corp. shall install the proposed shallow well point system for pumping groundwater from the water table along Main Street (upgradient).

A. A soil gas survey should be conducted prior to well installation. The survey should be completed within 45 days of Cleanup Plan approval.

B. Installation of the the well point pumping system shall commence within 45 days of completion of the soil gas survey.

CONDITION No. 21

Hexcel Corp. shall install the proposed pumping well to capture the PCB/waste oil plume beneath the builder room with the following conditions.

A. Hexcel Corp. shall establish Hydraulic Control of the plume within (90) ninety days from receipt of this approval.

B. If the single pumping well is not controlling the plume (as shown by head response in the monitor wells and piezometers) and beginning to recover

the plume within the 90 day time frame, additional recovery wells must be installed and operating within 120 days of Cleanup Plan approval.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 22

Hexcel Corp. shall install the two proposed French drains to capture the dense non-aquas phase liquid (DNAPL) with the following conditions:

A. The French drain system shall be installed and operating with 150 days from receipt of this approval.

B. The French drain adjacent to the Saddle River shall extend northward to within forty feet of the pump house.

C. Contaminants may migrate downward into the lower aquifer because of a lower of the pressure head in the lower aquifer by pumping during installation or cleanup therefore the following actions are required:

D. Air emissions of volatile organic compounds may need to be controlled duringtrenching trend drain installation to prevent unacceptable air emissions to workers and the general public.

E. Hexcel Corp. shall submit copies of all manifests for disposal of water during French drain installation with a summary of all activities.

RESPONSE

Hexcel agrees that the proposed French drain for capturing the DNAPL shall be operating within 150 days of Cleanup Plan approval. Operation of the French drain for collection of ground water cannot commence until approval from the PVSC for discharge of treated ground water to the sewer has been obtained due to the larger amount of water to be collected from this drain (estimated be approximately 4,500 gallons per day) and the impracticality of treating this water offsite. A permit application for discharge to the sewer was forwarded to the PVSC on December 7, 1989.

REQUESTED ACTION

Amend the Condition 22.A. to read as follows:

Hexcel Corp. shall install the two proposed French drains to capture the dense non-aqueous phase liquid (DNAPL) and ground water with the following conditions:

A. The French drain system for DNAPL recovery shall be installed and operating with 150 days from receipt of this approval. The French drain system for the ground water shall be installed and operating within 150 days of receipt of PVSC approval.

CONDITION No. 23

Hexcel Corp. shall be advised that remediation of the lower aquifer is not warranted at this time given the contaminant levels as established. However, remediation of this aquifer may be required at HEC (sic) 15 and in the vicinity of MW1. This cleanup, if necessary, shall not be implemented until the additional delineation of contaminant distribution in the lower aquifer is complete and the upper aquifer remediation systems are operating.

RESPONSE

This condition is identical to Condition 20.C.

REQUESTED ACTION

Delete this condition.

CONDITION No. 24

Soils Cleanup Conditions

Hexcel Corp. shall remove and properly dispose of all soil from the containment areas for tanks #5, 9, 10, 11, and 12 and shall document that the structures have a concrete bottom and their integrity is intent. The results of this inspection shall be submitted with pictures of the structures as part of the interim report.

RESPONSE

This condition is not appropriate regarding tank no. 5, as there is no containment area below this tank. Hexcel agrees that containment areas should be inspected and upgraded if appropriate. However, this matter, along other matters pertaining to the SPCC Plan, is currently under discussion between Hexcel and Fine Organics Corporation.

REQUESTED ACTION

Remove the reference to tank no. 5 from this condition.

CONDITION No. 25

Hexcel Corp. shall test the integrity of all aboveground tanks which may have contained solvents which were detected in soil and groundwater.

RESPONSE

Fine Organics Corporation currently has a tank inspection program for all aboveground tanks. The tanks are visually inspected daily for possible leaks, and associated valves are manually tested. Tank integrity testing may be included as part of the SPCC plan. This matter is currently under discussion between Hexcel and Fine Organics Corporation.

REQUESTED ACTION

This condition should be deleted.

CONDITION No. 26

Hexcel Corp. shall include in the Building I decommissioning plan and any residue shall be analyzed for PCBs and volatile organics. The location of the tunnel shall be on all future site maps, Oil floor seeps and sludge were present in the tunnel during the 8/15/86 site inspection, however, none was present during the 9/88 sampling.

RESPONSE

It is not clear what is required under this condition.

REQUESTED ACTION

This condition should be clarified.

CONDITION No. 27

Hexcel Corp's remediation plan for soils is acceptable; however, tasks shall be implemented during phase 1 of the cleanup.

The proposed methods for soil cleanup: bioremediation, soil flushing, or vapor stripping are all acceptable technologies for this site and a combination of these will probably be most effective. Bioremediation will take longer and vinyl chloride, a potent carcinogen, may be an end product. Generally, an ideal strategy for this site would be free product removal and "hot spot" removal for PHC above 1000 ppm and dewatering to enhance soil gas extraction at "worst

cast" areas; route contaminated water through a stripping tower or carbon column and use this "clean" water to flush soils at other less contaminated areas of site.

A. Pilot studies for soil gas extraction and in site (sic) PHC/PCB cleanup shall be completed and the results submitted in the interim report.

B. Cleanup and reconditioning of the sewerage system shall be implemented during phase 1. The progress of this actin shall be submitted in the interim report and this task shall be completed within 150 days from receipt of this document.

C. Improvements of the Chemical storage contaminant shall be implemented during phase 1. The progress of this action shall be submitted in the interim report and this task shall be completed within 150 days from receipt of this document.

RESPONSE

A. Pilot studies should not begin until the ground water and DNAPL collection systems have been implemented and the concentrations of contaminants have been substantially reduced. Results of pilot studies conducted prior to stabilization of the ground water would be inconclusive, because of the potential for high levels of volatile organics to migrate from the ground water into "cleaned" soils. In addition, because the VOCs in the ground water are a much greater environmental concern than the VOCs in the soil, it is appropriate to focus remediation activities first on the ground water and later on the soil.

B. Responsibility for cleanup and reconditioning of the sewerage system is currently under discussion between Hexcel and Fine Organics Corporation. In addition, these activities cannot be implemented until agency approval has been obtained. The schedule for completion of this work should be referenced to 150 days after agency approval.

C. Responsibility for improvements of the chemical storage tanks is currently under discussion between Hexcel and Fine Organics Corporation.

REQUESTED ACTION

Parts A, B, and C of this condition should be amended as follows:

A. Pilot studies for soil gas extraction and in situ PHC/PCB cleanup shall commence within 120 days after the ground water and DNAPL collection systems have been implemented.

B. Cleanup and reconditioning of the sewerage system shall be completed within 150 days of receipt of agency approval of all necessary permits.

C. Improvements of the Chemical storage contaminant shall be completed within 150 days of receipt of agency approval of all necessary permits.

CONDITION No. 28

Hexcel Corp. shall within 90 days from receipt of this approval conduct the following actions regarding the three underground tanks on site.

A. Remove or properly abandon the two underground tanks located in front of the boiler room.

B. Remove the abandon underground gasoline tank HEC (sic) 7.

C. Submit full documentation and details in the interim report regarding the removal/abandonment of the above tanks.

RESPONSE

Because the tanks referenced in this condition are empty and they are not contributing to soil or ground water contamination, there is no apparent urgency in removal or abandonment of these tanks. Removal of these tanks within 90 days may interfere with more important remediation activities. The removal schedule should instead be interfaced with other construction activities at Hexcel's discretion.

REQUESTED ACTION

Amend the first sentence of this condition to read as follows:

Hexcel Corp. shall conduct the following actions regarding the three underground tanks on site.

CONDITION No. 29

Hexcel Corp. shall comply with all federal, state and local laws, regulations and ordinances in implementing the approved Cleanup Plan.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 30

Hexcel Corp. shall obtain all federal, state and local permits prior to implementation of the approved Cleanup Plan. Should any conditions or limitation of said permits be more stringent that those in the approved Cleanup Plan, then said permit requirements shall supersede the terms of this approval.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 31

Upon the written request of NJDEP Hexcel Corp. shall submit for NJDEP review and approval any additional sampling plans deemed necessary by NJDEP during the implementation of a Cleanup Plan to fully delineate the nature and extent of environmental contamination on or from Hexcel Corp. Hexcel Corp. shall implement and complete any such additional Sampling Plans, and submit the results thereof, in accordance with the timeframe set forth in the approved additional Sampling Plan. Furthermore, Hexcel Corp. shall prepare and submit the NJDEP for approval, any revisions to the Cleanup Plan necessary to remediate any additional environmental contamination on or from Hexcel Corp. as identified during the cleanup plan implementation, by any additional sampling, or from any other source. Hexcel Corp. shall revise and submit the required information within a reasonable time not to exceed thirty (30) calendar days from receipt of written notification from NJDEP.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 32

The ECRA requirement for remediation of all environmental contamination on or from Hexcel Corp. and the terms and conditions of the approved Cleanup Plan shall be binding upon Hexcel Corp., and its officers, management officials, successors in interest, assigns, tense and any trustee in bankruptcy or receiver appointed pursuant to a proceeding in law or equity.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 33

Hexcel Corp. shall provide, within fourteen (14) days of receipt of this Cleanup Plan approval, financial assurance in the amount of $, as specified in the Cleanup Plan, in accordance with the regulatory requirements of N.J.A.C. 7:26B-6. Furthermore, Hexcel Corp. shall maintain the required financial assurance until NJDEP conducts a final inspection pursuant to N.J.A.C. 7:26B-5.7 and NJDEP issues Hexcel Corp. a written notification that the Cleanup Plan has been fully implemented to NJDEP's satisfaction.

Hexcel Corp. within fourteen (14) days of receipt of this Cleanup Plan approval, shall amen the amount of posted financial assurance specified in paragraph Hexcel Corp. of the Administrative Consent Order to equal the amount of $ the estimated cost of implementation of the Cleanup Plan or shall provide alternative financial assurance in accordance with the regulatory requirements of N.J.A.C. 7:26B-6 in the amount specified above. Furthermore, Hexcel Corp. shall maintain the required financial assurance until NJDEP issues Hexcel Corp. a written notification that the Cleanup Plan had been fully implemented to NJDEP's satisfaction.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 34

Hexcel Corp. shall provide written notification of the completion of the Transaction which subjected the Industrial Establishment to ECRA within seven (7) days of its occurrence.

RESPONSE

This notification has already been submitted.

REQUESTED ACTION

This condition has been fulfilled and should be deleted.

CONDITION No. 35

Hexcel Corp. shall prepare and submit to NJDEP monthly written progress reports detailing the implementation of the Cleanup Plan.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 36

Hexcel Corp. shall prepare and submit a final written report detailing the actual cleanup actions performed and final cleanup costs including overhead, compared to the cleanup actions, schedule and costs approved in the Cleanup Plan. The report should also include dates of cleanup activities, additional sampling results and other pertinent information.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 37

Hexcel Corp. shall provide, within fourteen (14) calendar days of receipt of this Cleanup Plan approval, oversight fees in the amount of $, based on the cost of the cleanup, in accordance with the regulatory requirements of N.J.A.C. 7:26B-1.10.

RESPONSE

Quantification of oversight fees is not included in the above condition.

REQUESTED ACTION

The costs associated with agency oversight should be specified.

CONDITION No. 38

Hexcel Corp. shall submit all results, proposals and reports in triplicate.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

CONDITION No. 39

Hexcel Corp. shall notify the NJDEP in writing and by phone at least fourteen days prior to the implementation of all sampling and fieldwork. Failure to properly notify the NJDEP regarding pending field work will result in appropriate enforcement action pursuant to ECRA.

RESPONSE

Because of difficulties that are often experienced in reaching the NJDEP by telephone, it is more appropriate that Hexcel shall notify the NJDEP in writing.

REQUESTED ACTION

Amend the first sentence of this condition to read as follows:

Hexcel Corp. shall notify the NJDEP in writing at least fourteen days prior to the implementation of all sampling and fieldwork.

CONDITION No. 40

Hexcel Corp. shall initiate the Cleanup Plan as conditioned in this letter within two (2) weeks of receipt of this letter, and in accordance with N.J.A.C. 7:26B-5.5(c), begin implementation of this Cleanup Plan according to the proposed time schedule. If any delay or anticipated delay had been or will be caused by events beyond the control of Hexcel Corp., then Hexcel Corp. shall notify NJDEP in writing within ten (10)days of the delay, describing the delay in precise cause or causes and requesting an extension. Instances in the costs or expenses incurred in fulfilling the requirement contained in this letter shall not be a basis for an extension or any such extension requests will not be granted. If Hexcel Corp. fails to implement the Cleanup Plan in accordance with the proposed schedule, the NJDEP reserves the right to implement full enforcement measures and assess penalties pursuant to N.J.A.C. 7:26B-9.

RESPONSE

No response.

REQUESTED ACTION

No requested action.

We anticipate that further discussions may be required prior to finalization of the Cleanup Plan and we will be available for discussion at your convenience. We suggest that a meeting be scheduled for the week of January 15, 1990 to finalize the Cleanup Plan.

If you have any comments or questions pertaining to the information presented in this letter, please do not hesitate to call.

Very truly yours,

A. William Nosil